

ITS Component Specification

APPENDIX A: Requirements Per Component

NOTE TO READER:

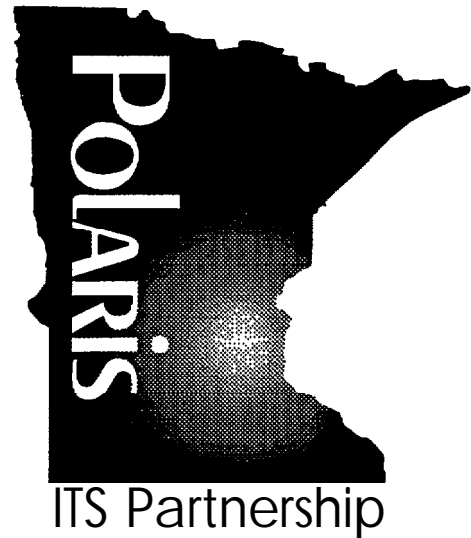
THIS IS A LARGE DOCUMENT

Due to its large size, this document has been segmented into multiple files. All files separate from this main document file are accessible from links ([blue type](#)) in the [table of contents](#) or the body of the document.

Minnesota Intelligent Transportation Systems

ITS Component Specification

APPENDIX A: Requirements Per Component



Prepared for the Minnesota Department of Transportation by:

Lockheed Martin Federal Systems
Intelligent Transportation Systems
Mail Drop 0124
1801 State Route 17C
Owego, New York 13827-3998

January 1997

Final

This document consists of one appendix listing components of multiple services. Each of the services has been extracted and is included on this page as a link. Please select the section you wish to view and click on it when the hand comes up. This will bring up the section you want.

TABLE OF CONTENT

[Account Management Provider\(s\)](#)

[Basic Vehicle](#)

[Broadcast Information Provider\(s\)](#)

[Centralized Control Signal Center\(s\)](#)

[Centralized Roadside Equipment](#)

[Decentralized Control Signal Center\(s\)](#)

[Decentralized Roadside Equipment](#)

[Demand Responsive Transit Center\(s\)](#)

[Division of Emergency Management Center](#)

[Emergency Vehicle](#)

[External Information Source\(s\)](#)

[Financial Institution\(s\)](#)

[Freeway Roadside Equipment](#)

[Freeway Traffic Management Center](#)

[Incident Dispatch Center\(s\)](#)

[Information Provider\(s\)](#)

[Inter-Jurisdictional Incident Management System](#)

[Inter-Jurisdictional Traffic System](#)

[Inter-Jurisdictional Transit System](#)

[Maintenance Dispatch Center](#)

Maintenance Dispatch Garage

Maintenance Vehicle

Mayday Service Provider(s)

Other Transit Management Center(s)

Parking Management Center(s)

Parking Management Roadside Equipment

Payment Instrument

Regional ITS Management Center

Regional ITS Management System

Research Center

Road Maintenance Roadside Equipment

Road Weather Information Center

State Patrol Dispatch Center

Tailored Traveler Information Provider

Toll Authority Center(s)

Toll Collection Roadside Equipment

Training Center

Transit Information Distribution Equipment

Transit Maintenance Garage

Transit Route Equipment

Transit Service Provider(s)

Transit Vehicle

Truck Center

User Interface Equipment

Component Specification - Appendix A: Requirements Per Component

The appendix lists the requirements that have been allocated to each component. The requirements for each component are grouped by, service, function, and subfunction. The following table defines the service, function, and subfunction acronyms used in the lists.

Acronyms Used in Component Specification Appendix A

<u>Service</u>	<u>Function</u>	<u>Sub-function</u>	<u>Acronym Description</u>
AM	MUSA		Account Management
			Manage User Service Accounts
		AUA	Administer User Accounts
		MSU	Manage Service Usage Data
		SBP	Manage Service Billing/Payments
	PSPS		Plan Service Price Structure
		MPR	Manage Pricing Requirements
		MPS	Manage Pricing Strategies
		MSPS	Manage Service Pricing Structures
IM	MIRP		Incident Management
			Manage Incident Response
		CRI	Classify and Record Incidents
		DAI	Detect and Acknowledge Incidents
		IRPPR	Initiate Response Plans and Procedures
		MIL	Manage Incident Log
		MMR	Manage Mayday Requests
		TRP	Track Response Progress
	MIRS		Manage Incident Resources
		MIRA	Manage Incident Resource Assignments
		TIRS	Track Incident Resource Status
	PIR		Plan Incident Response
		MRPP	Manage Response Plans and Procedures
		MRR	Manage Response Requirements

<u>Service</u>	<u>Function</u>	<u>Sub-Function</u>	<u>Acronym Description</u>
MNT		MIRRO	Manage Response Routes
			Maintenance
		MNA	Manage Maintenance Activities
		MMRD	Manage Maintenance Records
	PMA	PM	Perform Maintenance Activities
			Plan Maintenance Activities
		GMP	Generate Maintenance Plan
		MMPI	Manage Maintenance Planning Information
PTS		PMT	Prioritize Maintenance Tasks
			Public Travel Security/Enforcement
		PTSE	Public Travel Security/Enforcement
		MTSER	Manage Travel Security/Enforcement Requirements
	MTSE	MTSPR	Manage Travel Security Plans and Procedures
		MER	Manage Enforcement Requirements
			Manage Travel Security Enforcement
		ISPP	Implement Security Plans and Procedures
		ER	Enforce Regulations
		MVI	Manage Violations Log
RMR	DRO		Ride Matching and Reservations
			Manage Demand Responsive Operations
		DRS	Provide Demand Responsive Service
		RSA	Manage Rideshare Schedule Adherence
	RSO	RSU	Manage Rideshare Service Usage Data
			Manage Rideshare Offers
		DTSPI	Distribute Transit Service Provider Information
		MRP	Match Rider with Provider
		PRO	Plan Rideshare Operating Procedures
		PRR	Plan Rideshare Routes
		RSO	Manage Rideshare Offers

Service	Function	Sub-Function	Acronym Description
TC	RSR		Manage Rideshare Requests
		DRI	Distribute Rideshare Information
		RRQ	Manage Rider Requests
	MSNEO		Traffic Control
			Manage Signal Network Operations
		CSM	Control Signal Modes
		ISTP	Implement/Adapt Signal Timing Plans
		MSR	Manage Signal Resources
	MSNO		Manage Signal Network Operations
		CSM	Control Sign Modes
		STP	Implement/Adapt Signing Plans
		MSIR	Manage Signing Resources
	MTC		Monitor Traffic Conditions
		CTD	Collect Traffic Surveillance Data
		DITC	Distribute Traffic Conditions
		DETC	Determine Traffic Conditions
		STSD	Sense Traffic Surveillance Data
	PTCS		Plan Traffic Control Strategies
		MTCP	Manage Traffic Control Strategies/Plans
		MTCR	Manage Traffic Control Requirements
TCI	MTCD		Travel Conditions Information
			Manage Travel Conditions Data
		CTC	Collect Travel Conditions Source Data
		BTC	Determine Basic Travel Conditions and Travel Effects
		STD	Sense Travel Conditions Data
	MTCI		Manage Travel Conditions Information
		DTC	Distribute Travel Conditions Information
		TTC	Determine Tailored Travel Conditions

<u>Service</u>	<u>Function</u>	<u>Sub-function</u>	<u>Acronym</u>	<u>Description</u>
TFM	MAIN	TTE		Determine Tailored Travel Effects
				Public Transit Fleet Management
				(High Level Requirements)
		MAIN		(High Level Requirements)
		MFO		Manage Fleet Operations
		MPT		Manage Passenger Transfers
		MPU		Manage Passenger Usage Data
		MRC		Manage Route Changes
		MSA		Manage Schedule Adherence
		MTA		Manage Transit Assignments
		TRS		Track Resource Operational Status
	PFO			Plan Fleet Operations
		PFR		Plan Fixed/Flexible Routes, Trips, and Runs
		POP		Plan Fleet Operating Procedures
		STT		Schedule Trip Times
TNG	MTACT			Training
				Manage Training Activity
		MTCRD		Manage Training Credentials
		MTR		Manage Training Records
		PTC		Perform Training/Certification Activity
	PTA			Plan Training Activities
		ETS		Establish Training Schedule
		GTP		Generate Training Plan
		PPE		Plan Public Education
		PTR		Prioritize Training Tasks
TPD	MTPD			Trip Planning and Directions
				Manage Trip Planning and Directions Data
		CD		Compute Directions
		DR		Determine Route

<u>Service</u>	<u>Function</u>	<u>Sub-function</u>	<u>Acronym</u>	<u>Description</u>
TSI	MTTP			Manage Tailored Trip Plans and Directions
		BTI		Build Trip Plan
		DTPD		Distribute Trip Plans and Directions
	MTSD			Traveler Services Information
				Manage Traveler Services Data
		BTS		Manage Basic Traveler Services Information
		CTS		Manage Basic Traveler Services Source Data
	MTTS			Manage Tailored Traveler Services Information
		DTSI		Distribute Traveler Services Information
		DTTS		Determine Tailored Traveler Services Information
		MR		Make Reservations